

REMARKS

Reconsideration and allowance of the subject application in view of the foregoing amendments and the following remarks is respectfully requested. This Amendment should be entered under Rule 116 because it places this application in condition for allowance.

Claims 1-2 and 4-20 remain pending in the application. Claims 1 and 10 have been amended solely to improve claim language without otherwise touching the merits.

Indication of allowable subject matter of claims 18-20 in the absence of *any* rejections is believed appropriate and therefore respectfully requested.

The *35 U.S.C. 112, second paragraph* rejection of claim 1 and the respective dependent claims is noted. Although Applicants do not necessarily agree with the Examiner's position, amendments have nevertheless been made to specifically avoid the rejection, solely for the purpose of expediting prosecution.

In response to the Examiner's numerous questions regarding the claimed device, the Examiner's attention is kindly directed to the specification, especially the numeric example disclosed in FIG. 6, for a detailed description of the operation of embodiments of the claimed invention.

Withdrawal of the *35 U.S.C. 112, second paragraph* rejection is now believed appropriate and respectfully requested.

The repeated art rejections of claims 1-2 and 4-17 are noted. Applicants respectfully traverse the rejections for at least the reasons detailed in the previous Amendments which are incorporated by reference herein.

The anticipatory rejections of claims 10-11 and 13-16 are also traversed, because the Examiner has not specified with reasonable clarity how the applied reference discloses

- Na,
- Nb, and
- the relationship defined in the last limitation of independent claim 10, i.e., "wherein a length of a cycle of evolution of Na is variable and dependent on a value of Nb."

Clarification is respectfully requested.

The obviousness rejection of claims 1-2, 4-9, 12 and 17 are also traversed, because the applied references, especially Petersson, do not fairly teach or suggest the claimed fractional step phase-locked loop synthesizer of independent claim 1. In other words, the applied references, especially Petersson, neither teach nor suggest "fractional N synthesis" as required by the claimed fractional step phase-locked loop synthesizer. For the Examiner's information, Applicants submit herewith, as *Exhibit A*, a document explaining the differences between the "fractional N synthesis" (pages 6-7 of *Exhibit A*) and the "integer N synthesis" (pages 5-6 of *Exhibit A*). A person of ordinary skill in the art would understand, based on the knowledge generally available in the art as evident by *Exhibit A*, that the applied references do not teach or suggest "fractional N synthesis," and hence, fail to render obvious the claimed invention that uses the fractional step phase-locked loop synthesizer.

Withdrawal of the art rejections is now believed appropriate and respectfully requested.

All objections and rejections having been addressed, it is respectfully submitted that the application is in condition for allowance and a Notice to that effect is earnestly solicited.

The Examiner is invited to telephone the undersigned, Applicant's attorney of record, to facilitate advancement of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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